ARTICLE 8 - Landscaping Requirements Draft - August 8, 2005

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ARTICLE 8 Landscaping Requirements

- **8-1 Legislative Intent**. The purpose of this Article is to regulate the planting and preservation of landscape materials; to promote the general health, safety and welfare of Town citizens; to facilitate the creation of an attractive and healthy environment; to protect property values; and to further the urban design, economic development <u>and other goals and</u> objectives of the Comprehensive Plan. To these ends, these regulations are intended to promote the planting and preservation of landscape materials which:
 - 8-1.1. provide visual screening and noise buffering between incompatible land uses;
 - 8-1.2. provide parking lot landscaping to reduce the harmful effects of heat, noise, glare <u>and other</u> <u>disruptive effects</u> associated with motor vehicle use;
 - 8-1.3. provide for the creation of safe, attractively landscaped areas adjacent to public streets by using landscape materials which separate vehicular and pedestrian areas; and
 - 8-1.4. provide for useful, <u>well-defined</u> and attractive open space areas within the Town for the use of its citizens.
 - <u>8-1.5.</u> enhance the convenience and safety of pedestrians.
 - 8-1.6. maintain and enhance the overall quality and function of the tree cover and vegetative canopy within the Town, including energy conservation, shade and windbreaks, and
 - 8-1.7. promote traffic safety by controlling views and visually defining circulation patterns.

8-2 Applicability

8-2.1 Site Development Plans

The provisions of this Article shall apply to all site development plans <u>approved</u> after the effective date of this Ordinance, including those which include the reconstruction or enlargement of existing structures.

8-2.2 Parking Lots and Streets

This includes the enlargement of any parking lot, but does not include the resurfacing of any existing <u>parking</u> lot. This Article shall apply to the construction of any parking lot with more than five (5) spaces and to the construction, extension or widening of any public or private street.

8-3 Review Procedures

The Planning Director Zoning Administrator shall be responsible for the review of all landscape plans in accord with the procedures and time frames for review of site development plans as set forth in Article 11. The Planning Director Zoning Administrator shall approve or disapprove the plan with notice provided in writing and addressed to the owner or their designated agent applicant, identified on the site plan application documents.

8-4 Landscape Plan Requirements

8-4.1 Landscape Plan Required.

A landscape plan meeting the requirements of this Article is required for all site development plans required under Article 10 of this Ordinance. Every landscape plan required by this Article shall be prepared by a person in the practice of landscape design who is certified by the State of Virginia and shall contain the information set forth in Section 8-4.2.

8-4.2. Information Required on Landscape Plan

- Scale. Plans shall be drawn to a scale of not less than thirty (30) feet to the inch on sheets no less than eighteen by twenty-four inches (18" X 24") or greater than thirty-six by twenty-four inches (36" X 24"). The Zoning Administrator may modify this scale requirement if a different scale would aid the Town's review and processing of the application due to the size and/or configuration of the site. In no case shall the scale be less than fifty (50) feet to the inch.
- Contents. Plans shall illustrate with sufficient detail the location of <u>all existing trees of six</u> inches caliper or greater, proposed construction including streets, driveways, parking areas, curbs, sidewalks, utility lines, structures, fences, walls and landscape areas. Landscape areas shall indicate dimensions and all proposed locations of trees and plants, <u>cross-referenced to the plant schedule required in 8-5.4.</u>
- 3. Plant Schedule. Plans shall be accompanied by a schedule of plants proposed, including the number proposed, their height, caliper, or gallon size, and both the common and botanical names, in accord with the requirements of this Article.
- 4. Table of Open Space and Plant Calculations. Plans shall include a table calculating the amount of open space and/or parking lot area and the number of plants and trees required by the Ordinance and the amount of open space, trees and plants provided.

 Protection of Vegetation. Any existing vegetation proposed to be saved shall be identified on the Landscape Plan by name, location, and size. Methods of protecting the vegetation during construction activities shall be illustrated and/or explained on the Landscape Plan or on an attachment.

8-5 Street Tree Planting

8-5.1 Street Tree Planting Required

Street tree planting is required anytime a public street is constructed, expanded extended, or widened, in conjunction with development in a commercial or industrial district, and all multifamily, townhouse, condominium and mixed-use developments in any district.

8-5.2 Responsibility for Planting and Maintenance

Street trees shall be planted in the public right-of-way in accord with Section 8-5.1 by the owner or developer, who shall also be responsible for initial installation and for the replacement all trees that die within the first year of installation as well as all trees that are deemed by the Zoning Administrator within the first year of planting to be of insufficient size or quality to meet the provisions of this Ordinance.

8-5.3 Location of Street Trees

Where the Zoning Administrator determines that it is not physically possible to locate street trees within the public right-of-way, the trees shall be <u>planted in alternate locations approved by the Zoning Administrator and shall be protected through an open space easement, and shall be maintained by a property owner's association approved by the Town.</u>

8-5.4 Where Parking Lots abut public street rights-of-way

Where parking lots abut public street rights-of-way, the provisions of Section 8-6 shall apply.

8-5.5 Street Tree Standards

1. In reviewing plans for street tree plantings, the Zoning Administrator shall <u>determine whether</u> the plans conflict with <u>eonsider the size</u>, type, and condition of existing street trees and any

Town-adopted design studies, landscape plans, <u>or other plans</u>, designs <u>or policies</u> for the street.

- 2. The majority of street trees planted in conjunction with a specific site plan shall be medium or large-scale canopy trees specified in Section 8-5.6 to provide shade. and visual relief—On any street right-of-way on which the utility pole line for power, streetlights, and/or telephone service is or will be located, as determined by the Zoning Administrator, small flowering ornamental trees shall may be used, including trees that are a species approved by the entity responsible for maintaining such utility lines.
- 3. A minimum of one (1) large canopy tree is required for every fifty (50) feet of street frontage or part thereof. This provision does not require the planting of trees at even intervals.

 Ornamental trees should may be planted no more than twenty-five (25) feet apart, or in groups of two (2) or three (3) trees planted no more than fifty (50) feet apart.
- 4. Linden Trees shall not be planted as street trees.

8-5.6 Street Tree Specifications

The following are the minimum specifications for plant materials:

- The following varieties of trees, listed by common name, are appropriate for use as street trees: Green Ash; Sycamore; Red Maple; Norway Maple; Sugar Maple; Pin Oak; Red Oak; Willow Oak; Sweet Gum; London Plane Tree; Japanese Pagoda Tree; Littleleaf Linden; Silver Linden; and Japanese Zelkova.
- 1. <u>Large Canopy</u> street trees shall be a minimum of fifteen (15) feet in height, with a caliper of three (3) inches, at time of planting. Such trees shall be expected to attain a height of at least fifty (50) feet at maturity.
- 2. Medium street trees shall be a minimum of twelve (12) feet in height, with a caliper of two and one half (2.5) inches, at the time of planting. Such trees shall be expected to attain a height of at least thirty (30) feet at maturity.
- 3. Ornamental trees shall be a minimum of six (6) feet in height, with a caliper of one and one half (1.5) inches, at the time of planting. Such trees shall be expected to attain a maximum height of twenty-five (25) thirty (30) feet at maturity.

8-6 Parking Lot Landscaping

All parking areas as described below <u>and defined herein</u>, unless explicitly exempted, <u>shall</u> be landscaped as described in this Article.

For the purposes of this Article, parking lots are defined as any area used for the display or parking of any and all types of vehicles, boats, farm machinery, lawn and garden equipment, or heavy construction equipment, whether these items are for sale or lease. This definition includes, but is not limited to, parking lots and display areas for automobile dealerships and service stations. The area of the parking lot shall be calculated to include all paved areas used for ingress, egress, internal circulation, loading, and parking stalls.

8-6.1 Perimeter Parking Lot Landscaping

- Perimeter parking lot landscaping shall include all landscaped areas outside the perimeter
 of the paved area of the lot, including any landscaped area required adjacent to a public
 right-of-way.
- 2. Street trees shall be planted in accordance with Section 8-5 along all public street frontages which abut a parking lot, when such a street is constructed, extended or widened. An additional continuous planting of evergreen or deciduous shrubs shall be required between the public right-of-way and parking lot, located within a planting bed with a minimum eight (8) foot width.
- 3. Edges of parking lots that do not abut public rights-of-way shall be planted with a continuous landscaped area five (5) feet in width between the property line and the parking lot. One (1) canopy tree and three (3) shrubs for every fifty (50) feet of frontage shall be planted in this area.
- 4. Alternate methods of landscaping designed to decrease the visual impact visibility of the parking lot from the public right-of-way to an equal or better degree as would be achieved by the standards set forth herein, such as low fences, walls, or earthen berms, may be used, upon request of the applicant and approval of the Zoning Administrator.
- 5. No plant material, fence, wall, or berm may obstruct the sight distance view of motorists entering or leaving the site.

8-6.2 Interior Parking Lot Landscaping

- 1. Interior parking lot landscaping shall include any landscaped area over fifty (50) square feet in area within the perimeter of the paved parking area and more than five (5) feet from any main structure.
- 2. <u>Interior parking lot landscaping is required for</u> the construction or enlargement of any parking lot with eight (8) or more spaces. Such landscaping shall be in addition to any perimeter parking lot landscaping, street tree planting, and screening <u>otherwise required</u>.
- 3. An area equal to <u>or greater than ten (10) percent</u> of the paved area for parking, circulation, ingress, egress, and loading shall be landscaped with trees and/<u>or</u> shrubs. Paved storage areas for such uses as lumber or storage yards and warehouses may be subtracted from this total <u>when such areas are screened from view of the public right-of-way.</u>
- 4. No landscaped area shall be less than fifty (50) square feet in area. Landscaped areas shall be evenly distributed to provide shade and-visual relief throughout the parking area; however, such areas may be consolidated in whole or in part if the Zoning Administrator determines in writing that such even distribution of landscaped areas is not reasonably possible.
- 5. There shall be one (1) tree and three (3) shrubs for every eight (8) parking spaces. At least seventy-five percent (75%) of the trees shall be canopy trees.

8-6.3 Parking Lot Planting Specifications

For the purposes of this section, the following minimum specifications for parking lot plant materials shall apply:

- The following varieties of canopy trees, listed by common name, are appropriate for use as perimeter and interior plantings: Green Ash; Red Maple; Norway Maple; Sugar Maple; Red Oak; Willow Oak; Japanese Pagoda Tree; Japanese Zelkova; and Yellowwood. Evergreen trees include: Eastern Red Cedar; White Pine; Austrian Pine; Norway Spruce; American Holly; and Dark American Arborvitae. Ornamental trees include; Amur Maple; Dogwood; Washington Hawthorn; American Plum; Bradford Pear; Flowering Cherry; and Serviceberry.
- The following varieties of shrubs, listed by common name, are appropriate for use as perimeter and interior plantings: Azalea; Cotoneaster; Forsythia; Viburnum; Winged Euonymus; and Flowering Quince. Evergreen shrubs include: English Yew; Japanese Yew; Azalea; Chinese Holly; Japanese Holly; Rhododendron; and Abelia.

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- 1. Large street trees and Canopy trees shall be a minimum of fifteen (15) feet in height,—with a caliper of three (3) inches, at time of planting. Such trees shall be expected to attain a height of at least fifty (50) feet at maturity.
- 2. Medium street trees shall be a minimum of twelve (12) feet in height, with a caliper of two-and-one half (2.5) inches, at the time of planting. Such trees shall be expected to attain a height of at least thirty (30) feet at maturity.
- 3. Evergreen trees shall be a minimum of eight (8) feet in height with a full crown at time of planting.
- 4. Ornamental trees shall be a minimum of six (6) feet in height, with a caliper of one and one half (1.5) inches, at the time of planting. Such trees shall be expected to attain a maximum height of twenty-five (25) thirty (30) feet at maturity.
- 5. Shrubs shall be a minimum of two (2) feet in height at the time of planting. Shrubs or hedges planted to form a continuous, solid visual screen along public rights-of-way shall be at least two (2) feet in height within one (1) year of planting.

8-7 Tree Species [new section - includes some previous language as to acceptable species]]

8-7.1 Trees for Parking Lots and Paved Area Acceptable Tree Species

The following varieties of eanopy trees, listed by common name, are appropriate for meeting the requirements of this Ordinance. Alternative species may be used if the Zoning Administrator determines that such alternatives will achieve the purposes as defined herein and will provide equivalent characteristics regarding shading and resistance to disease and drought.

1. Deciduous Trees Growing to Heights of 30 Feet or More (Canopy Trees)

	Height		
Tree Species	(in feet)	Spread	Native
	703 703	201.201	
Bald Cyprus (Taxodium distichum)	50'-70'	20'-30'	Yes
Birch, River (Betula nigra)	40' - 70'	40'-60'	Yes
Black Gum (Nyssa sylvatica)	30'-50'	20'30'	Yes
Dawn Redwood (Metasequoia glyptostroboides)	70' – 100'	25'	
Elm, Lacebark (Ulmus parvifolia)	40'-50'	40'-50'	
Ginkgo (Ginkgo biloba) (only male trees)	50'-80'	50'+ - 80'+	
Golden Raintree (Koelreuteria paniculata)	30'-40'	30+'-40+'	
Hackberry, Common (Celtis occidentalis)	40'-60'	40'-60'	Yes
Hophornbeam, American (Ostrya Virginiana)	30'-40'	20'-35'	Yes
Hornbeam, European (Carpinus betula)	40'-60'	30'-40'	
Kentucky Coffee Tree (Gymnocladus dioicus)	60'-75'	40'-50'	Yes
Linden, American (Tilia americana)	60'-80'	30'-50'	Yes
Linden, Littleleaf (Tilia cordata)	60'-70'	30'-45'	Yes
Linden, Silver (Tilia tomentosa)	50'-70'	25'-45'	
Magnolia, southern (Magnolia grandiflora	60'-80'	30'-50'	Yes
Maple, Red (Acer rubrum)	40'-70'	40'-70'	Yes
Maple, Sugar (Acer saccharum)	60'-70'	40'-45'	Yes
Oak, Chestnut (Quercus prinus)	60'-70'	60'-70'	Yes
Oak, Northern Red (Quercus rubra)	60'-75'	60'+-75'+	Yes
Oak, Sawtooth (Quercus acutissima)	35'-45'	varies	
Oak, Scarlet (Quercus coccinea)	70'-75'	40'-50'	Yes
Oak, Southern Red (Quercus falcata)	70'-80'	70'+ - 80'+	Yes
Oak, Swamp White (Quercus bicolor)	70'-75'	50'+-75'	Yes
Oak, Water (Quercus nigra)	50'-80'	varies	Yes
Oak, White (Quercus alba)	50'-80'	50'+-80'+	Yes
Oak, Willow (Quercus phellos)	40'-60'	30'-40'	Yes
Pagoda Tree (Sophora japonica)	50'-75'	50'-75'	
Sweetgum, (Ligquidambar rotundiloba)	60'-75'	40'-50'	Yes
Zelkova, Japanese (Zelkova serrata)	50'-80'	50'-80'	

2. Deciduous Trees Growing to Heights under 30 Feet (Ornamental Trees)

	Height		
Tree Species	In feet	Spread	Native
Buckeye, Red (Aesculus pavia)	10-20	10-20+	Yes
Cherry, Flowering (Prunus serrulata)	20-25	20-25+	
Crabapple, Flowering (Malus "Prairiefire")			Yes
Dogwood, Korean (Cornus kousa)	20-30	20-30+	
Dogwood, Cornelian Cherry (Cornus mas)	20-25	15-20	
Fringetree, White (Chionanthus virginicus)	25-30	25-30	Yes
Hawthorn, Green (Cretageus viridis)	20-35	20-35	
Hornbeam, American (Carpinus caroliniana)	20-30	20-30	Yes
Maackia, Amur (Maackia amurensis)	20-30	Wider than tall	
Magnolia, Star (Magnolia stellata)	15-20	10-15	Yes
Magnolia, Sweet Bay (Magnolia virginiana)	10-20	10-20	Yes
Maple, Amur (Acer ginnala)	15-20	15+-20+	
Maple, Japanese (Acer palmatum)	15-25	15+-25+	
Maple, Paperbark (Acer griseum))	20-30	10-30	
Maple, Trident (Acer buergeranum)	20-25	20-25	
Redbud (Cercis Canadensis)	20-30	25-30	Yes
Silverbell, Carolina (Halesia carolina)	25-30	20-30	Yes
Serviceberry, Downy (Amelanchier arborea)	15-25	varies	Yes
Snowbell, Japanese (Styrax japonicus)	20-30	20-30	
Snowbell, Fragrant (Styrax obassia)	20-30	20-30	
Sourwood (Oxydendrum arboreum)	25-30	20	20-30

8-7.2 Unacceptable Species

The following varieties of trees are not acceptable for meeting the requirements of this Ordinance, due to the tendencies of such species to (i) negatively impact on native plant communities, (ii) damage to nearby structures and infrastructure, or (iii) possess inherent physiological traits that cause such trees to structurally fail. If the Zoning Administrator determines that any proposed species is inappropriate due to any of the above three characteristics, the Zoning Administrator may prohibit that species and require the applicant to submit an acceptable alternative.

Ashes, Norway Maple, Washington Hawthorn, American Plum, Bradford Pear and Pin Oak. Sycamores and London Planes are not appropriate for planting near paved areas.

8-8 Screening and Buffer Yards

8-8.1 Application

- 1. The requirements of this Section shall apply to all new construction and all reconstruction, <u>as</u> well <u>as</u> the enlargement of existing structures or uses constituting more than fifty (50) percent of the total floor area of the structure of the use or more than fifty (50) percent of the total areas of the use.
- 2. Screening is to be provided and maintained when certain conflicting land uses are located adjacent to or opposite from each other, to protect less intensive uses from the effects of traffic, noise, glare, trash, activity, visual disorder, or other noxious effects likely to be emitted by or associated with a more intensive use.
- 3. The burden to provide the necessary screening and buffer remains with the more intensive use to be screened, and is a continuing obligation which runs with the land so long as the original relationship between adjacent or opposite lots exists. In instances where the adjacent or opposite property is vacant, requirements for buffer yards shall be determined <u>based on the uses permitted in the zoning district of the vacant property or the uses shown on an approved site plan for that property. using the anticipated land use identified by the Comprehensive Plan Future Land Use Map.</u>

8-8.2 Visual Screening

Visual screening is required for the areas, uses, and activities listed below. Screening shall be <u>achieved</u> through the use of evergreen vegetation, <u>a mixture of evergreen and deciduous</u> <u>vegetation</u>, or a combination of such vegetation <u>in conjunction with</u> fences, walls or earthen berms.

- 1. Open storage areas, loading areas, and loading docks, and exposed machinery associated with commercial or industrial activities shall be screened from view of adjacent properties and the public right-of-way to a height of at least eight (8) feet within one year of planting.
- 2. Satellite dishes shall be screened from view along at least three (3) sides, to a minimum height of one-half the height of the satellite dish, from adjacent residential properties and public rights-of-way.
- 3. Outdoor areas used for the storage and/or collection of refuse, including trash dumpsters, shall be located in a paved area and screened from view of adjacent properties, from the public right-of-way and from within the lot. to a maximum height of eight (8) feet

- 4. Detention ponds shall be screened from adjacent residential properties and public rights-of-way to a height of at least four (4) feet within one year of planting.
- 5. Temporary storage areas on construction sites shall be screened from public rights-of-way and from adjacent properties that are used or zoned for residential purposes. Such screening shall be put in place no more than thirty (30) days after the establishment of the temporary storage area and shall be a height of no less than of six (6) feet above grade. Such screening shall be removed immediately upon the termination of the storage area or upon granting of an occupancy permit for the use that the storage area serves, whichever occurs first.

8-8.3 Buffer Yards, General Requirements

- 1. Buffer yards are land areas reserved for the purpose of providing screening and separation from adjacent, different land uses. These areas shall not be used for the storage of materials storage buildings, parking and loading areas for motor vehicles, or signs. Driveways and entrances connecting adjacent parking lots, developments or other adjacent developments properties may interrupt the required buffer yard only to the minimum amount necessary to provide a connection sufficient to carry the expected traffic. if the Zoning Administrator determines such interruption does not defeat the intent of this Article.
- 2. Buffer yards may be provided in the area required for setbacks except in residential zoning districts or for residential uses. Buffer yards in residential zoning districts may be provided by the use of common open space; common use easements located outside the required lot area; or by providing additional yard space in addition to the minimum yard requirements listed in the residential zoning district regulations.
- 3. <u>In the instance when If</u> the buffer yard required by this Article exceeds the setback required by the zoning district regulations, the required buffer yard must be provided.
- 4. Any existing buffer yard proposed to be saved by a site development plan application, which and that complies with the intention of this Article, as determined by the Planning Director Zoning Administrator, shall be deemed to meet these buffer yard requirements.
- 5. Whenever a proposed development plan is adjacent to a developed property that has not provided any or all of the required buffer, the adjacent proposed development shall provide sufficient buffer to achieve one half of the width of the required buffer yard.
- 6. No buffer yard shall be required to comprise more than fifteen (15) twenty (20) percent of the gross area of the subject property. In any case where the required buffer yard would exceed fifteen (15) percent of the property, the buffer yard shall be reduced to fifteen (15) percent of the gross area of the site.

7. For multifamily, commercial, and industrial uses where new fencing would create a continuous surface greater than ten (10) feet in length, at least one evergreen shrub or tree shall be planted every ten (10) feet along the fence. to soften its appearance [existing language relocated]

8-8.4 Uses Requiring Buffer Yards

- 1. Commercial, office, public, semi-public, and institutional uses including associated parking lots, shall provide a buffer yard between where they are adjacent to residential and recreational uses as specified in 8-8.5.
- 2. <u>Industrial uses, including associated parking lots and storage areas, shall provide a buffer yard where they are adjacent to residential and recreational uses as specified in 8-8.5.</u>
- 3. Townhouses, condominiums, duplexes, two (2) family dwellings, mobile home parks, <u>PUDs</u> and multifamily developments, including parking lots of ten (10) or more vehicles, shall provide a buffer yard between where they are adjacent to single-family detached dwellings as specified in 8-8.5.
- 4. Residential uses shall provide a buffer yard between where they are adjacent to major collector or arterial streets as specified in 8-8.5. (Adopted Town Council 3/16/99)

8-8.5 Screening and Buffer Yard Specifications [table is new way to show the standards]

Type of Buffer Yard	Minimum Width	Minimum Screening			
Commercial, office, public, semi-public, and institutional uses from residential uses	Twenty-five (25) feet plus one (1) foot for each foot of building height over thirty-five (35) feet	Double staggered row of evergreen trees planted fifteen (15) feet on center, or a double staggered row of evergreen shrubs planted ten (10) feet on center, forming a dense, continuous visual screen at least six (6) feet in height within one (1) year of planting.	or	A fence or wall <u>or earthen berm</u> , with a minimum six (6) foot height, with evergreen plantings interspersed every twenty-five (25) feet along the side of the wall facing the residential use	
Industrial uses from residential and recreational uses	Fifty (50) feet plus one (1) foot for each foot of building height over thirty-five (35) feet.	Double staggered row of evergreen trees planted fifteen (15) feet on center, or a double staggered row of evergreen shrubs planted ten (10) feet on center, forming a dense, continuous visual screen at least six (6) feet in height within one (1) year of planting	or	A fence or wall or earthen berm, with a minimum six (6) foot height, with evergreen trees interspersed every twenty-five (25) feet along the side of the wall facing the residential use	
Townhouses, condominiums, duplexes, two-family dwellings, mobile home parks, PUD's, and multifamily developments, including parking lots of ten (10) or more vehicles, from single-family detached dwellings	Fifteen (15) feet.	Double staggered row of evergreen trees planted fifteen (15) feet on center, or a double staggered row of evergreen shrubs planted ten (10) feet on center, forming a dense, continuous visual screen at least six (6) feet in height within one (1) year of planting	or	A fence or wall or earthen berm, with a minimum six (6) foot height, with evergreen trees interspersed every twenty-five (25) feet along the side of the wall facing the residential use.	
Residential uses from adjacent major collector or arterial streets (Adopted Town Council 3/16/99)	Twenty-five (25) feet; unbroken strip	One large evergreen tree for every 15 linear feet, forming a dense, continuous screen when mature.	or	A fence or wall <u>or earthen berm</u> , with a minimum of six (6) foot height, with evergreen <u>trees</u> interspersed every twenty-five (25) feet along both sides of the fence or wall.	
Rear boundaries of residential uses from public right-of-ways	Twenty-five (25) feet, unbroken strip	Double staggered row of evergreen trees planted fifteen (15) feet on center forming a dense, continuous visual screen at least six (6) feet in height within one (1) year of planting If rear facades of dwellings face the property line, the above requirement shall be increased to a triple row of evergreen trees planted fifteen (15) feet on center forming a dense, continuous visual screen at least ten (10) feet in height within one (1) year of planting			
Properties that abut the U.S. Route 29 Bypass	Corridor Landscape Imp	tings on their property as shown on the Town of Warrenton U.S. Route 29, Bypass provements plan prepared by Patton, Harris, Rust and Associates dated June 1996 endments that may be adopted. (Amended by Council 8/12/97			

8-9 <u>Conservation of Heritage and Specimen Trees</u> (In accord with § 10.1-1127.1 of the Code of Virginia, as amended)

8-9.1 Registry of Heritage and Specimen Trees

The Town shall compile and maintain a registry of designated Heritage and Specimen Trees, which shall become a part of this Ordinance by reference. The registry shall describe the species and character of each tree so designated. It shall include a map showing the location of each tree. This registry shall be updated from time to time by the Town Council, in consultation with an arborist or urban forester selected by the Council. The individual owners of such trees so designated shall be notified prior to the hearing on the adoption of such ordinance by certified mail.

8-9.2 <u>Exemptions</u>

The provisions of this section shall not apply to:

- 1. work conducted on federal or state property;
- 2. emergency work to protect life, limb or property;
- 3. routine installation, maintenance and repair of cable and wires used to provide cable television, electric, gas or telephone service;
- 4. <u>activities with minor effects on trees, including but not limited to, home gardening and</u> landscaping of individual homes; and
- 5. commercial silvicultural or horticultural activities, including but not limited to planting, managing, or harvesting forest or tree crops.

8-9.3 Removal of Heritage and Specimen Trees

Prior to removing any tree listed on the Town's Registry of Heritage and Specimen Trees, the owner shall obtain a written approval from the Zoning Administrator. In order to grant approval for removing a Heritage or Specimen Tree, the Zoning Administrator shall find that the proposal meets at least one of the following criteria:

- 1. The proposed development or use of the site will produce an outcome that better meets the purposes of these landscaping requirements, this Zoning Ordinance and the comprehensive plan.
- 2. <u>Due to solely to the requirements for conserving Heritage and Specimen Trees, the property</u> is so limited in use that no reasonable use remains.
- 3. <u>Due to solely to the requirements of conserving Heritage and Specimen Trees, the public health and safety would be subjected to undue risk and danger.</u>

8-10 Retention and Replacement of Trees

8-10.1 Exemptions

The following shall be exempt from the requirements of these tree replacement and planting regulations: school sites, playing fields, other nonwooded recreation areas and other facilities and uses of a similar nature, as determined by the Zoning Administrator to be sites on which trees would prevent the site from being used for its intended and permitted purpose.

8-10.2 Retention of Mature Existing Trees

The applicant shall <u>design and</u> arrange lots in such a fashion as to preserve existing woodlands and trees of six (6) inch caliper or greater <u>and</u> to place <u>such</u> existing trees within required setbacks and buffer yards to the greatest extent possible. <u>The preservation of such existing tree canopy may be</u> used as a credit to canopy requirements as provided in Section 8-10.3.3 of this Ordinance.

8-10.3 Tree Replacement Requirements

- 1. In instances where trees of six (6) inch caliper or larger are removed, they shall be replaced by trees indigenous to the Warrenton region. Deciduous trees shall be replaced by deciduous species and nondeciduous trees shall be replaced by nondeciduous species.
- 2. The Landscape Plan shall provide for the planting or replacement of trees on the site to the extent that, at 20 years, minimum tree canopies or covers will be provided in areas designated in this ordinance, as follows:
 - 1. Ten percent tree canopy for a site zoned business, commercial, or industrial;
 - 2. Ten percent tree canopy for a residential site zoned for 20 or more units per acre;
 - 3. Fifteen percent tree canopy for a residential site zoned for more than 10 but less than 20 units per acre; and
 - 4. Twenty percent tree canopy for a residential site zoned for 10 units or less per acre.

The Landscape Plan shall specify the caliper size required at the time of planting needed to achieve the above required canopies after 20 years of normal growth.

3. Credits and Reductions in Tree Canopy Requirements

Upon written request and justification of the applicant, the Zoning Administrator may approve credits to reduce the on-site tree canopy requirements if in the judgment of the Zoning Administrator, the purposes of this Ordinance and the goals of the Comprehensive Plan can be better met through such credits. Such credits may achieved through any of the following methods:

1. By preserving existing tree cover

Existing trees which are to be preserved may be included to meet all or part of the canopy requirements, and may include wooded preserves, if the site plan identifies such trees and the trees meet standards of durability, function and life expectancy consistent with the species specifications of Section 8-7.

2. By Preserving Outstanding Trees

Upon approval of the Zoning Administrator, up to 50% of the tree canopy requirements for the site may be met by preserving one or more trees of outstanding age, size or other physical characteristics in comparison to the typical specimen of that species normally found within the Town, if a certified arborist provides a written determination that any such trees are in good health. The canopy of each qualifying outstanding tree preserved shall count toward three (3) times as much canopy requirement.

3. Exceptions and Deviations

The Zoning Administrator shall grant an exception to or deviation from these requirements to allow for the reasonable development of farmland or other areas if the site is devoid of healthy or suitable woody materials or when the strict application of the requirements would result in unnecessary or unreasonable hardship to the developer.

In such instances, the Zoning Administrator shall permit the applicant to provide for a tree canopy bank whereby a portion of the development's tree canopy requirements are met from off-site planting or replacement of trees on sites within the Town that are determined by the Zoning Administrator to be consistent with the Comprehensive Plan.

5. Exemptions

The following shall be exempt from the requirements of these tree planting and replacement requirements: dedicated school sites, playing fields and other nonwooded recreation areas, and other facilities and uses of a similar nature.

26-8.5 Trees Protected From Removal

Deciduous or evergreen trees of eighteen (18) inch caliper or greater, and flowering or ornamental trees of ten (10) inch caliper or greater, shall not be removed unless the subdivider can demonstrate that such trees pose a risk to life or property; that the tree has been damaged or is otherwise unhealthy and unlikely to survive; or that retention would pose a severe economic burden on the property owner.

8-10.4 Tree Protection Zones

Tree protection zones shall be established for all trees and woodlands designated for retention on the site development plan. The tree protection zone shall extend radially for fifteen (15) feet from the trunk of the tree to be retained, or the distance from the trunk to the dripline, whichever is greater. The owner or developer shall be responsible for implementing such protection methods.

Tree protection zones shall meet the following requirements:

- 1. Grade changes and excavations shall not encroach upon the tree protection zone.
- 2. No toxic materials, including petroleum based or derived products, shall be stored within one hundred (100) feet of the tree protection zone.
- 3. The area within the tree protection zone shall not be built upon, nor shall any materials be stored, either temporarily or permanently. Vehicles and equipment shall not be parked within the zone.
- 4. Tree stumps located within ten (10) feet of the tree protection zone shall be removed by means of a stump grinder.
- 5. Severed tree roots adjacent to the tree protection zone shall be cut by a backhoe trenching tool that can safely prune the roots without causing undue damage to the root system, such as a "ditch witch", or or similar equipment, aligned radially to the tree. Roots shall not be cut in such a way as to cause lateral movement of the root systems. All severed roots shall be covered within four (4) hours and covered with moist peat moss, moist burlap, or other moist biodegradable material until permanent cover is installed.
- 6. Sediment, retention, and detention basins shall not be located or discharged into the tree protection zone.

8-10.5 Trees Permitted to be Removed or not Considered as Existing Trees

Existing diseased trees or trees weakened by age, storm, fire or other injury, which are dead or face imminent demise within a year, as determined in writing by a certified arborist report, may be removed without being subject to replacement requirements.

8-10.6 Site Development Procedures

- 1. Trees scheduled to remain shall be marked. Where woodlands or groups of trees are to be retained, only those trees on the perimeter shall be marked. Temporary fencing or root <u>pruning</u> may be required along areas adjacent to heavy equipment operation.
- 2. Trees to be removed shall not be felled, pushed, or pulled into a tree protection zone or into trees that are to be retained.

- 3. In addition to the tree protection zone, additional trees may be left standing between the trunks of the trees to be retained and the limits of grading or construction activity. These trees may be removed near the completion of the project to permit final grading and landscaping to be accomplished.
- 4. When the original grade cannot be retained at the tree protection zone line and the resulting grade change exceeds two feet, a retaining wall shall be constructed outside the tree protection zone. The wall shall be constructed of large stones, brick, building tile, concrete, or treated wood beams not less than six (6) inches by six (6) inches. A means for drainage through the wall shall be provided so water will not accumulate on either side of the wall. A layer of clean stone, sized three-quarter (3/4) to one (1) inch, shall be placed at a thickness of one (1) foot along the base of the wall, extending in height to twelve (12) inches below finished grade. The retaining wall shall be four (4) inches above the finished grade line.
- 5. All trees which have experienced any disturbance or have had damage to roots or branches shall be fertilized. This shall be accomplished in early fall (September-October) or mid-spring (April-May), with fall application preferred. Fertilizer shall be applied in a manner that will assist tree growth while limiting nutrient runoff. broadcast over the surface in an area twice the size of the tree protection zone, or a minimum area of one thousand (1,000) square feet per tree, whichever is larger. Fertilizer grade shall have approximately three (3) parts nitrogen to one (1) part phosphorous and one (1) part potassium (3-1-1 ratio) and be applied at a rate equivalent to one (1) pound actual nitrogen per one thousand (1,000) square feet.
- 6. In instances where there is no alternative to locating underground utilities within a tree protection zone, tunneling should be used wherever possible to avoid trenching. Where trenches are to be used, they should be located as far away as possible from tree trunks and tamped lightly to avoid air pockets.

8-11 Planting Procedures

All trees to be planted shall meet the specifications of the American Association of Nurserymen. The planting of trees shall be done in accordance with the standardized landscape specifications jointly adopted by the Virginia Nurserymen's Association, the Virginia Society of Landscape Designers and the Virginia Chapter of the American Society of Landscape Architects. All trees and shrubs shall be installed in a sound manner following accepted professional planting procedures. At a minimum, all trees planted shall have rootballs adequate to enclose the entire root system, all trees shall be mulched and staked, and all plants shall be watered at time of installation.

8-12 Maintenance Responsibilities

- 1. The owner, or the agent of the owner, of commercial and industrial uses, multifamily rental units, and common open spaces controlled by homeowners associations shall be responsible for the maintenance, repair, and replacement of all landscape materials, fences, berms, and walls required by this Article.
- 2. All landscape materials shall be kept in a healthy condition free of all disease and infestation.
- 3. All fences, berms, and walls shall be maintained in a safe and attractive condition. The owner or agent, upon written notification by the Zoning Administrator, shall repair or replace any landscape materials, fences, berms, or walls not meeting the requirements of this Section within thirty (30) days of receipt of said notice.

8-13 Penalties for Unauthorized Removal

In instances where trees are removed prior to approval of a site grading plan, or in violation of an approved tree protection plan, the applicant shall reimburse the town for the assessed value of the tree and associated administrative and labor costs incurred by site inspection, enforcement, and tree replacement. Such funds shall be used to plant replacement trees on the site in the location of the trees illegally removed.

<u>Unauthorized removal shall be considered a violation of this Zoning Ordinance and shall be subject to the</u> penalties as set forth in Article 11.